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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/772,135

Filing Date: February 4, 2004

Applicant(s): Yih-Shin Tan et al.

Entitled: METHODS, SYSTEMS, AND COMPUTER PROGRAM

PRODUCTS FOR CONFIGURING RULES FOR

SERVICE NODES IN GRID SERVICE ARCHITECTURE

SYSTEMS

Examiner: Michael E. Keefer

Group Art Unit: 2154

Attorney Docket No.: RSW920030276US1 (7161-536U)

TRANSMITTAL OF APPEAL BRIEF

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Submitted herewith is Appellants' Appeal Brief in support of the Notice of Appeal filed May 11, 2009. Please charge any shortage in fees due under 37 C.F.R. §§ 1.17, 41.20, and in connection with the filing of this paper, including extension of time fees, to Deposit Account 09-0461, and please credit any excess fees to such deposit account.

Date: July 13, 2009 Respectfully submitted,

/Steven M. Greenberg/

Steven M. Greenberg, Registration No. 44,725

Customer Number 46320

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APPEAL BRIEF

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This Appeal Brief is submitted in support of the Notice of Appeal filed May 11, 2009, wherein Appellants appeal from the Examiner's rejection of claims 1 through 8, 10 through 13, 15 through 20, 22 through 32 and 34 through 37.

I. REAL PARTY IN INTEREST

This application is assigned to International Business Machines Corporation by assignment recorded on February 4, 2004 at Reel 014968, Frame 0504.

II. RELATED APPEALS AND INTERFERENCES

Appellant is unaware of any related appeals and interferences.

III. STATUS OF CLAIMS

Claims 1 through 8, 10 through 13, 15 through 20, 23 through 32 and 34 through 37 are pending in this Application and have been four times rejected. Claims 9, 21 and 33 were canceled in the amendment dated November 7, 2008 (the "Last Amendment"). Claim 14 was canceled in the Amendment dated November 13, 2007 (the "First Amendment"). It is from the multiple rejections of claims 1 through 8, 10 through 13, 15 through 20, 23 through 32 and 34 through 37 that this Appeal is taken.

IV. STATUS OF AMENDMENTS

Claims 1 through 8, 10 through 13, 15 through 20, 23 through 32 and 34 through 37 were amended previously. Claims 1 through 13 and 15 through 36 were amended in the First Amendment. Claim 37 was added in the First Amendment. Claims 1, 3, 10 through 13, 15 through 16, 22 through 25, 27 through 29 and 34 through 37 were amended in the amendment dated April 23, 2008 (the "Second Amendment"). Finally, Claims 1, 11, 13, 23, 25, 35 and 37 were amended in the Last Amendment.

V. SUMMARY OF CLAIMED SUBJECT MATTER

By reference to the abstract of Appellants' published specification, in an embodiment of Appellants' invention, operational rules are transmitted from a first service node that receives a request for service to a second service node that is configured to apply the operational rule to

requests for service in response to the request. For example, operational rules can be propagated from a primary node to a secondary node that operates responsive to the primary node.

Specifically, in this example the operational rule defines how the secondary node is to process the request for service from the primary node. Furthermore, the operational rules provided by the primary node can be propagated in a hierarchical fashion throughout the grid to other nodes.

With specific reference to claim 1, a method of configuring nodes for service requests in an Open Grid Services Architecture (OGSA) is provided. (Par [0030]) The method includes transmitting an OGSA operational rule from a first OGSA service node to a second OGSA service node that is configured to apply the OGSA operational rule to a request for service from the first OGSA service node. (Par [0030]) The OGSA operational rule specifies how the request for service is handled. (Par [0030]) Specifically, the OGSA operational rule includes a rule associated with either security, error recovery, or business transaction terms/conditions associated with the request for service. (Par [0036])

With specific reference to claim 11, a method is provided for the configuration of secondary OGSA service nodes to handle service requests from a primary OGSA service node in a OGSA service node network. (Par [0030]) The method includes receiving a request for registration at a primary OGSA service node from a secondary OGSA service node capable of providing a service to the primary OGSA service node. (Par [0026]) The method also includes registering the secondary OGSA service node as capable of providing the service to the primary OGSA service node (Par [0026]) and transmitting a response from the primary OGSA service node to the secondary OGSA service node including an OGSA operational rule that defines how

the service is to be provided to the primary OGSA service node. (Par [0026]) As before, the OGSA operational rule includes a rule associated with either security, error recovery, or business transaction terms/conditions associated with the request for service. (Par [0036]) The method further includes maintaining the OGSA operational rule accessible to the secondary OGSA service node and associated with the primary OGSA service node. (Par [0008]) Yet further, the method includes receiving a request for service from the primary OGSA service node at the secondary OGSA service node. (Par [0029]) Finally, the method includes providing service to the primary OGSA service node in accordance with the OGSA operational rule in response to determining that the request for service is associated with the primary OGSA service node. (Par [0030])

With specific reference to claim 13, a system for configuring OGSA nodes for service requests includes means for transmitting an OGSA operational rule from a first OGSA service node that receives a request for service to a second OGSA service node that is configured to apply the OGSA operational rule to the request for service (Par [0030]) in response to the request from the first OGSA service node for service. (Par [0030]) The system also includes means for propagating the OGSA operational rule from the second OGSA service node to a third OGSA service node that is registered with the second OGSA service node as capable of providing service thereto. (Par [0030]) Again, the OGSA operational rule specifies how the request for service is handled, and includes a rule associated with at least security, error recovery, or business transaction terms/conditions associated with the request for service. (Par [0036])

With specific reference to claim 23, a system is provided for configuring secondary OGSA service nodes to handle service requests from a primary OGSA service node in an OGSA service node network. (Par [0030]) The system includes means for receiving a request for registration at a primary OGSA service node from a secondary OGSA service node capable of providing a service to the primary OGSA service node. (Par [0026]) The system also includes means for registering the secondary OGSA service node as capable of providing the service to the primary OGSA service node (Par [0026]) and transmitting a response from the primary OGSA service node to the secondary OGSA service node including an OGSA operational rule that defines how the service is to be provided to the primary OGSA service node. (Par [0026]) As before, the OGSA operational rule includes a rule associated with either security, error recovery, or business transaction terms/conditions associated with the request for service. (Par [0036]) The system further includes means for maintaining the OGSA operational rule accessible to the secondary OGSA service node and associated with the primary OGSA service node. (Par [0008]) Yet further, the system includes means for receiving a request for service from the primary OGSA service node at the secondary OGSA service node. (Par [0029]) Finally, the system includes means for providing service to the primary OGSA service node in accordance with the OGSA operational rule in response to determining that the request for service is associated with the primary OGSA service node. (Par [0030])

With specific reference to claim 25, a computer program product can be configured for OGSA nodes for service requests. (Par [0030]) The computer program product includes a computer readable medium having computer readable program code embodied therein. (Par [0030]) The computer readable program product includes computer readable program code

configured to transmit an OGSA operational rule from a first OGSA service node that receives a request for service to a second OGSA service node and is configured to apply the OGSA operational rule to the request for service in response to the request from the first OGSA service node for service. (Par [0030]) The OGSA operational rule in turn includes a rule associated with either security, error recovery, or business transaction terms/conditions associated with the request for service. (Par [0036])

With specific reference to claim 35, a computer program product is provided for configuring OGSA secondary OGSA service nodes to handle service requests from a primary OGSA service node in a OGSA service node network. (Par [0030]) The computer program product includes computer usable program code for receiving a request for registration at a primary OGSA service node from a secondary OGSA service node capable of providing a service to the primary OGSA service node. (Par [0026]) The computer program product also includes computer usable program code for for registering the secondary OGSA service node as capable of providing the service to the primary OGSA service node (Par [0026]) and transmitting a response from the primary OGSA service node to the secondary OGSA service node including an OGSA operational rule that defines how the service is to be provided to the primary OGSA service node. (Par [0026]) As before, the OGSA operational rule includes a rule associated with either security, error recovery, or business transaction terms/conditions associated with the request for service. (Par [0036]) The computer program product further includes computer usable program code for maintaining the OGSA operational rule accessible to the secondary OGSA service node and associated with the primary OGSA service node. (Par [0008]) Yet further, the computer program product includes computer usable program code for receiving a request for

service from the primary OGSA service node at the secondary OGSA service node. (Par [0029]) Finally, the computer program product includes computer usable program code for providing service to the primary OGSA service node in accordance with the OGSA operational rule in response to determining that the request for service is associated with the primary OGSA service node. (Par [0030])

With specific reference to claim 37, a method of configuring OGSA nodes for service requests in a hierarchical OGSA network is provided. (Par [0025]) The method includes transmitting an OGSA operational rule from a high level hierarchical OGSA service node to a lower level hierarchical OGSA service node that is configured to receive requests for service from other OGSA service nodes. (Pars [0025], [0030]) In particular, the OGSA operational rule specifies how a request for service from the high level hierarchical OGSA service node is handled. (Par [0030]) Further, the OGSA operational rule includes a rule associated with either security, error recovery, or business transaction terms/conditions associated with the request for service. (Par [0036])

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1 through 8, 10, 13, 15 through 20, 22, 25 through 32, 34 and 37 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,278,993 to Kumar et al. (Kumar) in view of Foster et al., The Physiology of the Grid, (Foster), and further in view of U.S. Patent No. 7,408,336 to Schneider et al. (Schneider).

Claims 11, 12, 23, 24, 35 and 36 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,973,493 to Slaughter et al. (Slaughter) in view of Foster.

VII. THE ARGUMENT

<u>THE REJECTION OF CLAIMS 1 THROUGH 8, 10, 13, 15 THROUGH 20, 22, 25 THROUGH 32, 34 AND</u> 37 UNDER 35 U.S.C. § 103

Examiner applies rejections under 35 U.S.C. § 103(a) to claims 1 through 8, 10, 13, 15 through 20, 22, 25 through 32, 34 and 37 based upon the allegedly obvious combination of Kumar, Foster and Schneider. For the convenience of the Honorable Board, claims 2 through 8 and 10 stand or fall with claim 1, claims 15 through 20 stand or fall with claim 13, and claims 26 through 32 stand or fall with claim 25.

On October 10, 2007, the Patent Office issued the "Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in View of the Supreme Court Decision in KSR International Co. v. Teleflex Inc.," 73 Fed. Reg. 57,526 (2007) (hereinafter the Examination Guidelines). Section III is entitled "Rationales To Support Rejections Under 35 U.S.C. 103." Within this section is the following quote from the Supreme Court: "rejections on obviousness grounds cannot be sustained by merely conclusory statements; instead there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." KSR Int'l Co.,127 S. Ct. 1727, 1741 (2007) (quoting In re Kahn, 441 F.3d 977, 988 (Fed. Cir. 2006)).

Referring to the first column on page 57,529 of the Examination Guidelines, the following is a list of rationales that may be used to support a finding of obviousness under 35 U.S.C. § 103:

- (A) Combining prior art elements according to known methods to yield predictable results:
 - (B) Simple substitution of one known element for another to obtain predictable results;
- (C) Use of known technique to improve similar devices (methods, or products) in the same way;
- (D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;
- (E) "Obvious to try" choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;
- (F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art;
- (G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

Upon reviewing the Examiner's analysis in the paragraph spanning pages 2 through 6 of the final office action dated January 23, 2009 (the "Final Office Action"), the Examiner appears to be employing rationale (A). If the Examiner is not relying upon rationale (A), Appellants request that the Examiner clearly identify the rationale, as described in the Examination Guidelines, being employed by the Examiner in rejecting the claims under 35 U.S.C. § 103.

With respect to rationale (A), the Examination Guidelines set forth a precise process for which the Examiner must follow in order to establish a prima facie case of obviousness under 35 U.S.C. § 103(a). Specifically, to reject a claim based on this rationale, Office personnel must resolve the Graham factual inquiries. Thereafter, Office personnel must then articulate the following:

(1) a finding that the prior art included each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference;

- (2) a finding that one of ordinary skill in the art could have combined the elements as claimed by known methods, and that in combination, each element merely would have performed the same function as it did separately;
- (3) a finding that one of ordinary skill in the art would have recognized that the results of the combination were predictable; and
- (4) whatever additional findings based on the Graham factual inquiries may be necessary, in view of the facts of the case under consideration, to explain a conclusion of obviousness.

With respect, Examiner has not adequately articulated a finding that the prior art included each element claimed with the only different between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference. In this regard, in as much as Kumar does not teach "the operational rule comprises a rule associated with either security, error recovery, or business transaction terms/conditions associated with the request for service", the prior art--namely Kumar, Foster and Schneider when combined lack teachings directed to each element claimed in claims 1, 11, 25 and 37.

In this regard, each of independent claims 1, 13, 25 and 37 require the presence of an OGSA operational rule that includes a rule associated with at least one of security, error recovery, and business transaction terms/conditions associated with the request for service (in the parlance of a Markush group). Examiner in rejecting claims 1, 13, 25 and 37 on page 2 of the Final Office Action wholly ignores this limitation and bases Examiner's entire rejection of ALL FOUR independent claims 1, 13, 25 and 37 upon a re-statement of language from Appellants' claims and the single statement, "Fig. 10, items 215 and 213. The first node transmits the search query to a search function". Examiner's analysis is wholly inappropriate as the basic dictates of the Examination Guidelines require the Examiner to set forth some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.

Notwithstanding, Examiner has compared the specific limitation described above to column 24, lines 53-54 of Kumar on page 5 of the Final Office Action in which Examiner stated:

wherein the operational rule comprises a rule associated with at least one of security, error recovery, and business transaction terms/conditions associated with the request for service. (Col. 24, lines 53-54, the search request for bios flash upgrades is associated with both security and error recovery.)

Thus, Examiner has construed by comparison the term "operational rule" to mean "search request". Examiner's claim construction is wholly inappropriate under the law. Specifically, obviousness under § 103 is a two-step inquiry. The first step is a **proper construction** of the claims. ... The second step requires a **comparison of the properly construed claim to the prior art**." During patent examination, the pending claims must be "given their broadest reasonable interpretation consistent with the specification," and the broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. Therefore, the Examiner must (i) identify the individual elements of the claims and properly construe these individual elements, and (ii) identify corresponding elements disclosed in the allegedly anticipating reference and compare these allegedly corresponding elements to the individual elements of the claims. This burden has not been met.

The term operational rule on its face means a rule about an operation. In Appellants' specification, the term "operation rule" is described as follows:

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Medichem, S.A. v. Rolabo, S.L., 353 F.3d 928, 933 (Fed. Cir. 2003) (internal citations omitted).

² In re ICON Health and Fitness, Inc., 496 F.3d 1374, 1379 (Fed. Cir. 2007) ("[T]he PTO must give claims their broadest reasonable construction consistent with the specification. Therefore, we look to the specification to see if it provides a definition for claim terms, but otherwise apply a broad interpretation."); In re Hyatt, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000).

³ In re Cortright, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999)

See also, <u>Panduit Corp. v. Dennison Mfg. Co.</u>, 810 F.2d 1561, 1567-68 (Fed. Cir. 1987) (In making a patentability determination, analysis must begin with the question, "what is the invention claimed?" since "[c]laim interpretation,... will normally control the remainder of the decisional process"); see <u>Gechter v. Davidson</u>, 116 F.3d 1454, 1460 (Fed. Cir. 1997) (requiring explicit claim construction as to any terms in dispute).

⁵ <u>Lindermann Maschinenfabrik GMBH v. American Hoist & Derrick Co.</u>, 730 F.2d 1452, 221 USPQ 481 (Fed. Cir. 1984).

[0030] The primary service node 110 also transmits operational rules 120 to the secondary service node 105 that define how the secondary service node 105 is to handle service requests from the primary service node 110. For example, the operational rules can specify how services are to be provided when the secondary service node 105 determines that the service request has been issued by the primary service node 110 rather than another primary service node with which the secondary service node 105 is also registered. In some embodiments according to the invention, the operational rules can include pricing information, geographic information, specific information related to which service provider to use, and the like. For example, in some embodiments according to the invention, the operational rule can be price range information that can be used to determine which service provider to use based on a particular price point provided by a user included with the request 101 to the primary service node 110.

Thus, as used in Appellants' specification, operational rules define how a service node handles service requests from another node. Appellant's usage then of "operational rule" is entirely consistent with the plain meaning of "operational rule" as evidenced by paragraph [030] of Appellants' published specification. Examiner, however, deviates from any meaning possibly associated with "operational rule" and instead construes "operational rule" to mean a "search request" which on its face is defined as a "request for a search".

As set forth in M.P.E.P. 2111, "During patent examination, the pending claims must be given their broadest reasonable interpretation <u>consistent with the specification</u>. Specifically, the Federal Circuit's <u>en banc</u> decision in <u>Phillips v. AWH Corp.</u>, 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005) expressly recognized that the USPTO employs the "broadest reasonable interpretation" standard. Examiner's improper claim construction of "operational rule" as merely a search request exceeds the legal standard for claim construction during examination and inhibits Examiner's ability to properly compare the cited art to Appellants' claims. It naturally follows that Examiner has failed to locate within Kumar the critical and claimed teaching of "the

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⁶ The Patent and Trademark Office ("PTO") determines the scope of claims in patent applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction "in light of the specification as it would be interpreted by one of ordinary skill in the art." In re Am. Acad. of Sci. Tech. Ctr., 367 F.3d 1359, 1364, 70 USPQ2d 1827 (Fed. Cir. 2004). Indeed, the rules of the PTO require that application claims must "conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description." 37 CFR 1.75(d)(1).

operational rule comprises a rule associated with either security, error recovery, or business transaction terms/conditions associated with the request for service". In that rationale (A) of the Examination Guidelines requires Examiner to locate this limitation in any of Kumar, Foster or Schneider, Examiner of course has not satisfied the burden set forth by rationale (A) of the Examination Guidelines and for this reason, Examiner cannot have proven a prima facie case of obviousness under 35 U.S.C. § 103(a).

THE REJECTION OF CLAIMS 11, 12, 23, 24, 35 AND 36 UNDER 35 U.S.C. § 103

Examiner applies rejections under 35 U.S.C. § 103(a) to claims 11, 12, 23, 24, 35 and 36 based upon the allegedly obvious combination of Slaughter and Foster. For the convenience of the Honorable Board, claim 12 stands or falls with claim 11, claim 24 stands or falls with claim 23, and claim 36 stands or falls with claim 35.

Of note, each of independent claims 11, 23 and 35 recites "the operational rule comprises a rule associated with either security, error recovery, or business transaction terms/conditions associated with the request for service". Examiner in rejecting claims 11, 23 and 35 wholly ignores this limitation. In fact, Examiner's entire argument with respect to claims 11, 23, and 35 are set forth verbatim as follows:

4. Claims 11-12,23-24, and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slaughter et al. (US 6973493), hereafter Slaughter in view of Foster.

Regarding claims 11, 23, and 35, Slaughter discloses:

A method of configuring secondary service nodes to handle service requests from a primary service node in a service node network, the method comprising:

receiving a request for registration at a primary service node from a secondary service node including that the secondary service node is capable of providing a service to the primary service node; (Col. 34 lines 13-14 discloses that the client receives a "capability credential", Le. a request for registration.)

registering that the secondary service node is capable of providing the service with primary service node; transmitting a response from the primary service node to the secondary service node including an operational rule that defines how the service is to be provided to the primary service node; (Col. 34 lines 43-48 disclose the client specifying a rule for how results are to be returned to the client.)

maintaining the operational rule accessible to the secondary service node and associated with the primary service node; receiving a request for service from the primary service node at the secondary service node; and

providing service to the primary service node responsive to determining that the request for service is associated with the primary service node. (Col. 34 lines 65-67 - Col. 35 lines 1-5 disclose sending a request to the service and getting a result compliant with the rule sent to the service)

Thus, once again, Examiner has not adequately met the burden set forth by rationale (A) of the Examination Guidelines and has failed in establishing a prima facie case of obviousness under 35 U.S.C. § 103(a).

To the extent the Examiner, having considered the foregoing arguments, persists and prepares an Examiner's Answer, Examiner is reminded of Examiner's responsibility under M.P.E.P. 1207.02(A)(1)(9)(e) to map every claim term in claims 1, 11, 13, 23, 25, 35 and 37 to the cited art. In this regard, for the convenience of the Examiner the entirety of is provided herein:

For each rejection under 35 U.S.C. 102 or 103 where there are questions as to how limitations in the claims correspond to features in the prior art even after the examiner complies with the requirements of paragraphs (c) and (d) of this section, the examiner must compare at least one of the rejected claims **feature by feature** with the prior art relied on in the rejection. **The comparison must align the language of the claim <u>side-by-side</u> with a reference to <u>the specific page, line number, drawing reference number, and quotation</u> from the prior art, as appropriate.**

Specifically, Examiner must point out with particularity the precise teaching in the cited art that maps to the claimed element "the operational rule comprises a rule associated with either security, error recovery, or business transaction terms/conditions associated with the request for

service", while applying the ordinary meaning of "operational rule" as a proper claim construction under M.P.E.P. 2111.01(I).⁷

Based upon the foregoing, Appellants respectfully believe that the Examiner's rejections under 35 U.S.C. § 103(a) are not viable and Appellants, therefore, respectfully solicit the Honorable Board to reverse the Examiner's rejections under 35 U.S.C. § 103(a).

Date: July 13, 2009 Respectfully submitted,

/Steven M. Greenberg/ Steven M. Greenberg Registration No. 44,725 Customer Number 46320

⁷ Although claims of issued patents are interpreted in light of the specification, prosecution history, prior art and other claims, this is not the mode of claim interpretation to be applied during examination. During examination, the claims must be interpreted as broadly as their terms reasonably allow. <u>In re American Academy of Science Tech Center</u>, 367 F.3d 1359, 1369, 70 USPQ2d 1827, 1834 (Fed. Cir. 2004)

VIII. CLAIMS APPENDIX

1. (Previously Amended) A method of configuring nodes for service requests in an Open Grid Services Architecture (OGSA), the method comprising:

transmitting an OGSA operational rule from a first OGSA service node to a second OGSA service node that is configured to apply the OGSA operational rule to a request for service from the first OGSA service node, wherein the OGSA operational rule specifies how the request for service is handled, and wherein the OGSA operational rule comprises a rule associated with at least one of security, error recovery, and business transaction terms/conditions associated with the request for service.

- 2. (Previously Amended) The method according to Claim 1 further comprising: propagating the OGSA operational rule from the second OGSA service node to a third OGSA service node that is registered with the second OGSA service node as capable of providing service thereto.
- 3. (Previously Amended) The method according to Claim 1 wherein transmitting an OGSA operational rule is preceded by:

registering the second OSGA service node with the first OGSA service node to define the second OGSA service node as available to the first OGSA service node to receive requests for service.

4. (Previously Amended) The method according to Claim 1 wherein the OGSA operational rule comprises a first OGSA operational rule, the method further comprising:

modifying the first OGSA operational rule to provide a second OGSA operational rule; and

transmitting the second OGSA operational rule to the second OGSA servIce node responsive to modifying the first OGSA operational rule.

(Previously Amended) The method according to Claim 1 further comprising: receiving a first request for service at the first OGSA service node; determining that the first request is associated with the OGSA operational rule; applying the OGSA operational rule to the first request to provide a propagated first request; and

transmitting the propagated first request to the second OGSA service node.

6. (Previously Amended) The method according to Claim 1 further comprising: receiving a first request for service at the first OGSA service node; determining that the first request is associated with the OGSA operational rule; applying the OGSA operational rule to the first request to provide a propagated first request; and

transmitting the propagated first request to a third OGSA service node rather than the second OGSA service node responsive to a parameter associated with the third OGSA service node.

7. (Previously Amended) The method according to Claim 1 further comprising:

receiving a first request for service at the first OGSA service node, the first request for service including a token associated with the first request that further defines how the first request is to be serviced;

determining that the first request is associated with the OGSA operational rule; applying the OGSA operational rule to the first request to provide a propagated first request; and

transmitting the propagated first request and the token to the second OGSA service node.

- 8. (Previously Amended) The method according to Claim 7 wherein the token comprises at least one of a price, geographic location, and quality of service.
- 9. (Canceled)
- 10. (Previously Amended) The method according to Claim 1 wherein the OGSA operational rule comprises a requestor identifier that identifies the first OGSA service node as transmitting the request for service to the second OGSA service node.
- 11. (Previously Amended) A method of configuring secondary Open Grid Services

 Architecture (OGSA) service nodes to handle service requests from a primary OGSA service

 node in a OGSA service node network, the method comprising:

receiving a request for registration at a primary OGSA service node from a secondary

OGSA service node including that the secondary OGSA service node is capable of providing a service to the primary OGSA service node;

registering that the secondary OGSA service node is capable of providing the service to the primary OGSA service node;

transmitting a response from the primary OGSA service node to the secondary OGSA service node including an OGSA operational rule that defines how the service is to be provided to the primary OGSA service node;

maintaining the OGSA operational rule accessible to the secondary OGSA service node and associated with the primary OGSA service node;

receiving a request for service from the primary OGSA service node at the secondary OGSA service node; and

providing service to the primary OGSA service node in accordance with the OGSA operational rule responsive to determining that the request for service is associated with the primary OGSA service node, wherein the OGSA operational rule comprises a rule associated with at least one of security, error recovery, and business transaction terms/conditions associated with the request for service.

12. (Previously Amended) The method according to Claim 11 wherein the primary OGSA service node comprises a first primary OGSA service node and the OGSA operational rule comprises a first OGSA operational rule, the method further comprising:

receiving a request for registration at a second primary OGSA service node from the secondary OGSA service node including that the secondary OGSA service node is capable of providing service to the second primary OGSA service node;

registering that the secondary OGSA service node is capable of providing the service to the second primary OGSA service node;

transmitting a response from the second primary OGSA service node to the secondary OGSA service node including a second OGSA operational rule that defines how the service is to be provided to the second primary OGSA service node;

maintaining the second OGSA operational rule accessible to the secondary OGSA service node and associated with the second primary OGSA service node;

receiving a request for service from the second primary OGSA service node at the secondary OGSA service node; and

providing service to the second primary OGSA service node using the second OGSA operational rule responsive to determining that the request for service is associated with the second primary OGSA service node.

13. (Previously Amended) A system for configuring Open Grid Services Architecture (OGSA) nodes for service requests, comprising:

means for transmitting an OGSA operational rule from a first OGSA service node that receives a request for service to a second OGSA service node that is configured to apply the OGSA operational rule to the request for service in response to the request from the first OGSA service node for service; and

means for propagating the OGSA operational rule from the second OGSA service node to a third OGSA service node that is registered with the second OGSA service node as capable of providing service thereto, wherein the OGSA operational rule specifies how the request for service is handled, and wherein the OGSA operational rule comprises a rule associated with at least one of security, error recovery, and business transaction terms/conditions associated with the request for service.

- 14. (Canceled).
- 15. (Previously Amended) The system according to Claim 13 further comprising: means for registering the second OGSA service node with the first OGSA service node to define the second OGSA service node as available to the first OGSA service node to receive requests for service.
- 16. (Previously Amended) The system according to Claim 13 wherein the OGSA operational rule comprises a first OGSA operational rule, the system further comprising:

means for modifying the first OGSA operational rule to provide a second OGSA operational rule; and

means for transmitting the second OGSA operational rule to the second OGSA service node responsive to modifying the first OGSA operational rule.

17. (Previously Amended) The system according to Claim 13 further comprising: means for receiving a first request for service at the first OGSA service node;

means for determining that the first request is associated with the OGSA operational rule; means for applying the OGSA operational rule to the first request to provide a propagated first request; and

means for transmitting the propagated first request to the second OGSA service node.

18. (Previously Amended) The system according to Claim 13 further comprising:

means for receiving a first request for service at the first OGSA service node;

means for determining that the first request is associated with the OGSA operational rule;

means for applying the OGSA operational rule to the first request to provide a propagated

first request; and

means for transmitting the propagated first request to a third OGSA service node rather than the second OGSA service node responsive to a parameter associated with the third OGSA service node.

19. (Previously Amended) The system according to Claim 13 further comprising:

means for receiving a first request for service at the first OGSA service node, the first request for service including a token associated with the first request that further defines how the first request is to be serviced;

means for determining that the first request is associated with the OGSA operational rule; means for applying the OGSA operational rule to the first request to provide a propagated first request; and

means for transmitting the propagated first request and the token to the second OGSA service node.

20. (Previously Amended) The system according to Claim 19 wherein the token comprises at least one of a price, geographic location, and quality of service.

21. (Canceled)

- 22. (Previously Amended) The system according to Claim 13 wherein the OGSA operational rule comprises a requestor identifier that identifies the first OGSA service node as transmitting the request for service to the second OGSA service node.
- 23. (Previously Amended) A system for configuring secondary Open Grid Services

 Architecture (OGSA) service nodes to handle service requests from a primary OGSA service

 node in an OGSA service node network, comprising:

means for receiving a request for registration at a primary OGSA service node from a secondary OGSA service node including that the secondary OGSA service node is capable of providing a service to the primary OGSA service node;

means for registering that the secondary OGSA service node is capable of providing the service to the primary OGSA service node;

means for transmitting a response from the primary OGSA service node to the secondary OGSA service node including an OGSA operational rule that defines how the service is to be provided to the primary OGSA service node;

means for maintaining the OGSA operational rule accessible to the secondary OGSA service node and associated with the primary OGSA service node;

means for receiving a request for service from the primary OGSA service node at the secondary OGSA service node; and

means for providing service to the primary OGSA service node in accordance with the OSGA operational rule responsive to determining that the request for service is associated with the primary OGSA service node, wherein the OGSA operational rule comprises a rule associated with at least one of security, error recovery, and business transaction terms/conditions associated with the request for service.

24. (Previously Amended) The system according to Claim 23 wherein the primary OSGA service node comprises a first primary OGSA service node and the OGSA operational rule comprises a first OGSA operational rule, the system further comprising:

means for receiving a request for registration at a second primary OGSA service node from the secondary OGSA service node including that the secondary OGSA service node is capable of providing service to the second primary OGSA service node;

means for registering that the secondary OGSA service node is capable of providing the service with second primary OGSA service node;

means for transmitting a response from the second primary OGSA service node to the secondary OGSA service node including a second OGSA operational rule that defines how the service is to be provided to the second primary OGSA service node;

means for maintaining the second OGSA operational rule accessible to the secondary OGSA service node and associated with the second primary OGSA service node;

means for receiving a request for service from the second primary OGSA service node at the secondary OGSA service node; and

means for providing service to the second primary OGSA service node using the second OGSA operational rule responsive to determining that the request for service is associated with the second primary OGSA service node.

25. (Previously Amended) A computer program product for configuring Open Grid Services Architecture (OGSA) nodes for service requests comprising:

a computer readable medium having computer readable program code embodied therein, the computer readable program product comprising:

computer readable program code configured to transmit an OGSA operational rule from a first OGSA service node that receives a request for service to a second OGSA service node that is configured to apply the OGSA operational rule to the request for service in response to the request from the first OGSA service node for service, wherein the OGSA operational rule comprises a rule associated with at least one of security, error recovery, and business transaction terms/conditions associated with the request for service.

26. (Previously Amended) The computer program product according to Claim 25 further comprising:

computer readable program code configured to propagate the OGSA operational rule from the second OGSA service node to a third OGSA service node that is registered with the second OGSA service node as capable of providing service thereto.

27. (Previously Amended) The computer program product according to Claim 25 further comprising:

computer readable program code configured to register the second OGSA service node with the first OGSA service node to define the second OGSA service node as available to the first OGSA service node to receive requests for service.

28. (Previously Amended) The computer program product according to Claim 25 wherein the OGSA operational rule comprises a first OGSA operational rule, the computer program product further comprising:

computer readable program code configured to modify the first OGSA operational rule to provide a second OGSA operational rule; and

computer readable program code configured to transmit the second OGSA operational rule to the second OGSA service node responsive to modifying the first OGSA operational rule.

29. (Previously Amended) The computer program product according to Claim 25 further comprising:

computer readable program code configured to receive a first request for service at the first OGSA service node;

computer readable program code configured to determine that the first request is associated with the OGSA operational rule;

computer readable program code configured to apply the OGSA operational rule to the first request to provide a propagated first request; and

computer readable program code configured to transmit the propagated first request to the second OGSA service node.

30. (Previously Amended) The computer program product according to Claim 25 further comprising:

computer readable program code configured to receive a first request for service at the first OGSA service node;

computer readable program code configured to determine that the first request is associated with the OGSA operational rule;

computer readable program code configured to apply the OGSA operational rule to the first request to provide a propagated first request; and

computer readable program code configured to transmit the propagated first request to a third OGSA service node rather than the second OGSA service node responsive to a parameter associated with the third OGSA service node.

31. (Previously Amended) The computer program product according to Claim 25 further comprising:

computer readable program code configured to receive a first request for service at the first OGSA service node, the first request for service including a token associated with the first request that further defines how the first request is to be serviced;

computer readable program code configured to determine that the first request is associated with the OGSA operational rule;

computer readable program code configured to apply the OGSA operational rule to the first request to provide a propagated first request; and

computer readable program code configured to transmit the propagated first request and the token to the second OGSA service node.

- 32. (Previously Amended) The computer program product according to Claim 31 wherein the token comprises at least one of a place, geographic location, and quality of service.
- 33. (Canceled)
- 34. (Previously Amended) The computer program product according to Claim 25 wherein the OGSA operational rule comprises a requestor identifier that identifies the first OGSA service node as transmitting the request for service to the second OGSA service node.
- 35. (Previously Amended) A computer program product of configuring Open Grid Services Architecture (OGSA) secondary OGSA service nodes to handle service requests from a primary OGSA service node in a OGSA service node network, comprising:

a computer readable medium having computer readable program code embodied therein, the computer readable program product comprising:

computer readable program code configured to receive a request for registration at a primary OGSA service node from a secondary OGSA service node including that the secondary OGSA service node is capable of providing a service to the primary OGSA service node;

computer readable program code configured to register that the secondary OGSA service node is capable of providing the service with primary OGSA service node;

computer readable program code configured to transmit a response from the primary OGSA service node to the secondary OGSA service node including an OGSA operational rule that defines how the service is to be provided to the primary OGSA service node;

computer readable program code configured to maintain the OGSA operational rule accessible to the secondary OGSA service node and associated with the primary OGSA service node;

computer readable program code configured to receive a request for service from the primary OGSA service node at the secondary OGSA service node; and

computer readable program code configured to provide service to the primary OGSA service node in accordance with the OGSA operational rule responsive to determining that the request for service is associated with the primary OGSA service node, wherein the OGSA operational rule comprises a rule associated with at least one of security, error recovery, and business transaction terms/conditions associated with the request for service.

36. (Previously Amended) The computer program product according to Claim 35 wherein the primary OGSA service node comprises a first primary OGSA service node and the OGSA operational rule comprises a first OGSA operational rule, the computer program product further comprising:

computer readable program code configured to receive a request for registration at a second primary OGSA service node from the secondary OGSA service node including that the secondary OGSA service node is capable of providing service to the second primary OGSA service node;

computer readable program code configured to register that the secondary OGSA service node is capable of providing the service with second primary OGSA service node;

computer readable program code configured to transmit a response from the second primary OGSA service node to the secondary OGSA service node including a second OGSA operational rule that defines how the service is to be provided to the second primary OGSA service node;

computer readable program code configured to maintain the second OGSA operational rule accessible to the secondary OGSA service node and associated with the second primary OGSA service node;

computer readable program code configured to receive a request for service from the second primary OGSA service node at the secondary OGSA service node; and

computer readable program code configured to provide service to the second primary OGSA service node using the second OGSA operational rule responsive to determining that the request for service is associated with the second primary OGSA service node.

37. (Previously Amended) A method of configuring Open Grid Services Architecture (OGSA) nodes for service requests in a hierarchical OGSA network, the method comprising:

transmitting an OGSA operational rule from a high level hierarchical OGSA service node to a lower level hierarchical OGSA service node that is configured to receive requests for service from a plurality of other OGSA service nodes, wherein the OGSA operational rule specifies how a request for service from the high level hierarchical OGSA service node is handled, and wherein the OGSA operational rule comprises a rule associated with at least one of security, error recovery, and business transaction terms/conditions associated with the request for service.

IX. EVIDENCE APPENDIX

No evidence submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 of this title or of any other evidence entered by the Examiner has been relied upon by Appellant in this Appeal, and thus no evidence is attached hereto.

X. RELATED PROCEEDINGS APPENDIX

Since Appellant is unaware of any related appeals and interferences, no decision rendered by a court or the Board is attached hereto.